US ARMY
CORPS OF
ENGINEERS

Peninsula Beach Feasibility Study

Public Workshop
and
Environmental Scoping Meeting

Wednesday, November 13, 2002
6:30 p.m.
Belmont Plaza Pool

US ARMY
CORPS OF
ENGINEERS

Planning Partnership

Los Angeles District
U.S. Army Corps of
Engineers

Alex
Hernandez

Dennis
Eschen

Workshop Objectives

- Review USACE Civil Works Program
- Summarize Planning Process
- Describe Study Area and Problems
- Identify Potential Solutions
- Compliance with Provisions of NEPA
- Public Comment Session

US ARMY
CORPS OF
ENGINEERS

Civil Works Mission

Mission:

- Civil Works
- Military Construction
- Support/Work for Others

Six Steps to a Civil Works Project

1. **Public Recognition of the Problem**
2. **Request for Federal Assistance**
3. **Study and Report Preparation**
4. **Report Review and Approval**
5. **Congressional Authorization**
6. **Design and Construction**

Six Steps to a Civil Works Project

1. Public Recognition of the Problem
2. Request for Federal Assistance
3. Study and Report Preparation
4. Report Review and Approval
5. Congressional Authorization
6. Design and Construction

Six Steps to a Civil Works Project

1. Public Recognition of the Problem
2. Request for Federal Assistance
3. Study and Report Preparation
4. Report Review and Approval
5. Congressional Authorization
6. Design and Construction

Six Steps to a Civil Works Project

1. Public Recognition of the Problem
2. Request for Federal Assistance
3. Study and Report Preparation
4. Report Review and Approval
5. Congressional Authorization
6. Design and Construction

Six Steps to a Civil Works Project

1. Public Recognition of the Problem
2. Request for Federal Assistance
3. Study and Report Preparation
4. Report Review and Approval
5. Congressional Authorization
6. Design and Construction

Six Steps to a Civil Works Project

1. Public Recognition of the Problem
2. Request for Federal Assistance
3. Study and Report Preparation
4. Report Review and Approval
5. Congressional Authorization
6. Design and Construction

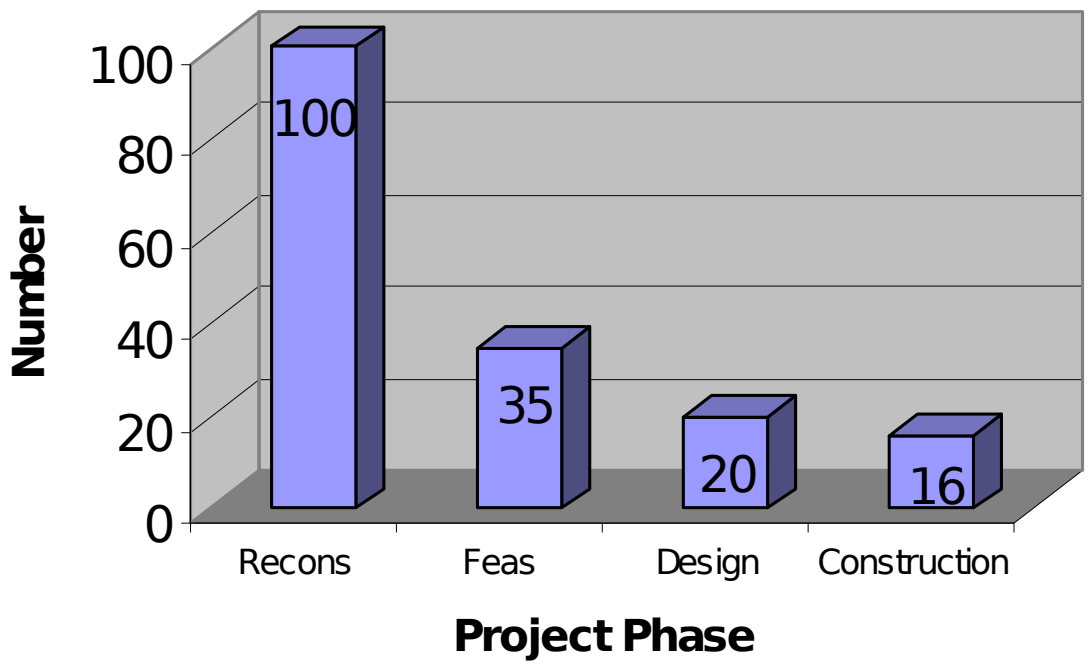
Project Development Process

- **Reconnaissance Phase**
  - **100% Federal**
- **Feasibility Study / EIS**
  - **50% Federal / 50% Non-Federal**
- **Preconstruction, Engineering and Design**
  - **65% Federal / 35% Non-Federal**
- **Construction**
  - **65% Federal / 35% Non-Federa**
- **Operation and Maintenance**
  - **100% Non-Federal**

Study Timeline

Reconnaissance Phase	1 year
Feasibility Phase	1½ to 3 years
Approvals and Authorization	1 year
Plans, Specs, and PCA	1 to 2 years
Final Plans and Construction	2 years

Civil Works Project Evolution



Federal Interest Criteria

- Technically Feasible
- Economically Justified
- Environmentally Sound
- Publicly Acceptable
- Non-Federal Sponsor

Study Cost Sharing

	Federal	Non-Federal
Reconnaissance Study	100%	--
Feasibility Study	50%	50%

Environmental Review Process

National Environmental Policy Act (NEPA)

- NEPA Outcomes (EA, EIS)
- EIS Components
  - Affected environment description
  - Alternatives development
  - Impact analysis
  - Mitigation measure formulation
- Public Involvement
  - Scoping
  - Workshops
  - Written comments

US ARMY
CORPS OF
ENGINEERS

Peninsula Beach Feasibility Study

Public Workshop
and
Environmental Scoping Meeting

Wednesday, November 13, 2002
6:30 p.m.
Belmont Plaza Pool

US ARMY
CORPS OF
ENGINEERS

Peninsula Beach Feasibility Study

Peninsula Beach

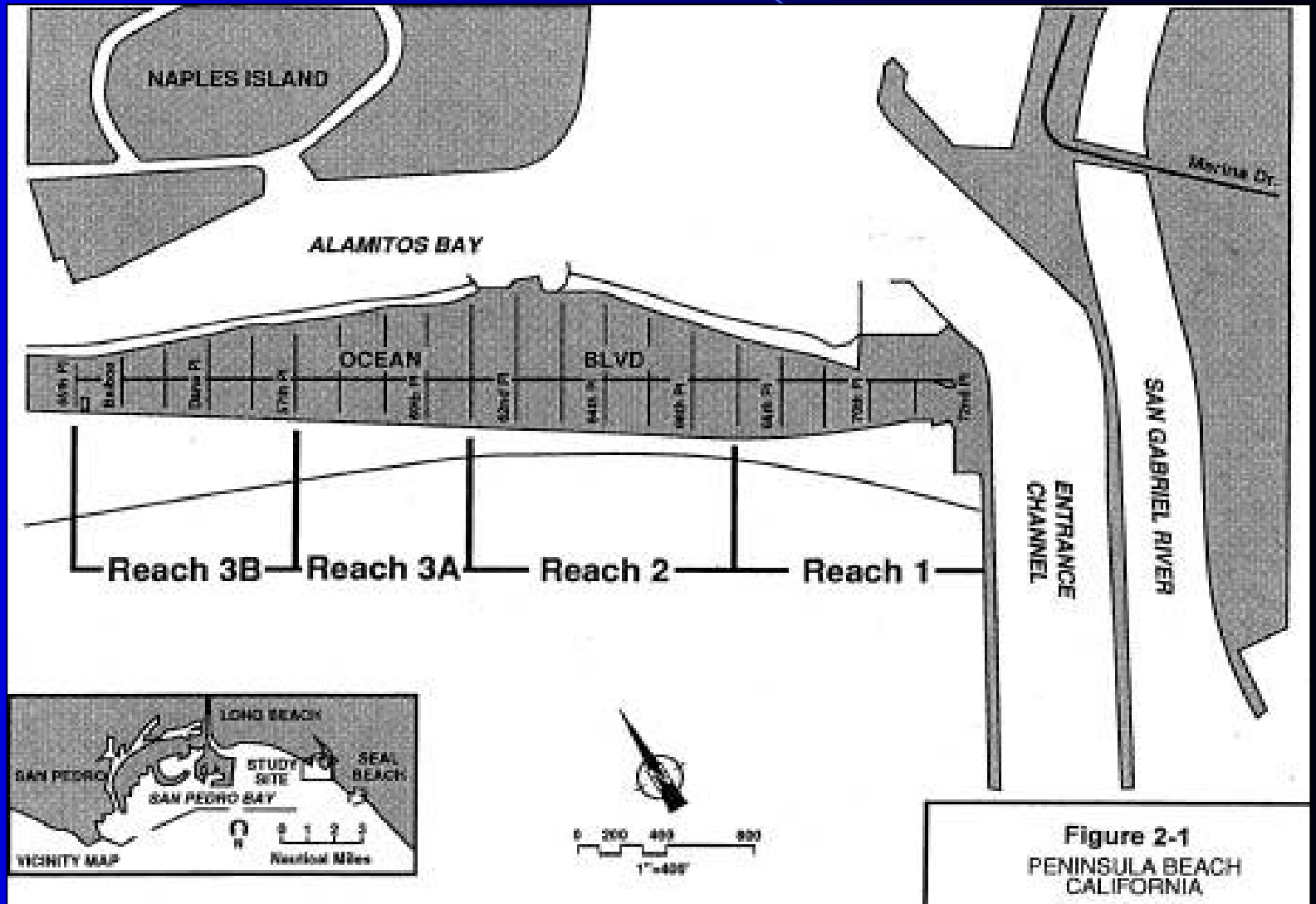
Study Authority

September 28, 1994 Resolution of the House Committee on Public Works and Transportation, as follows:

…The Secretary of the Army is requested to review the report of the Chief of Engineers on Point Mugu to San Pedro Breakwater, California Beach Erosion Control Study…and other pertinent reports to determine whether modifications of recommendations therein are advisable at this time, in the interest of shoreline protection, storm damage reduction and other purposes for Peninsula Beach (East Beach) and vicinity, Long Beach, California

US ARMY CORPS OF ENGINEERS

Study Area Problems



US ARMY
CORPS OF
ENGINE

Peninsula Beach Feasibility Stud

PHOTO 10: Aerial view looking west near the conclusion of Phase I beach nourishment effort (20 December 1994).

US ARMY
CORPS OF
ENGINEERS

Planning Objectives

- To Reduce the Coastal Storm Flood and Erosion Damage Potential
- To Abate Shoreline Erosion
- To Preserve and Enhance the Environment
- To Maintain Recreation Beach Opportunities

Potential Alternatives

- Renourishment
- Beach Fill with Groins
- Perched Beach
- Seawall/Revetment
- Submerged Offshore Reef

US ARMY
CORPS OF
ENGINEERS

Renourishment

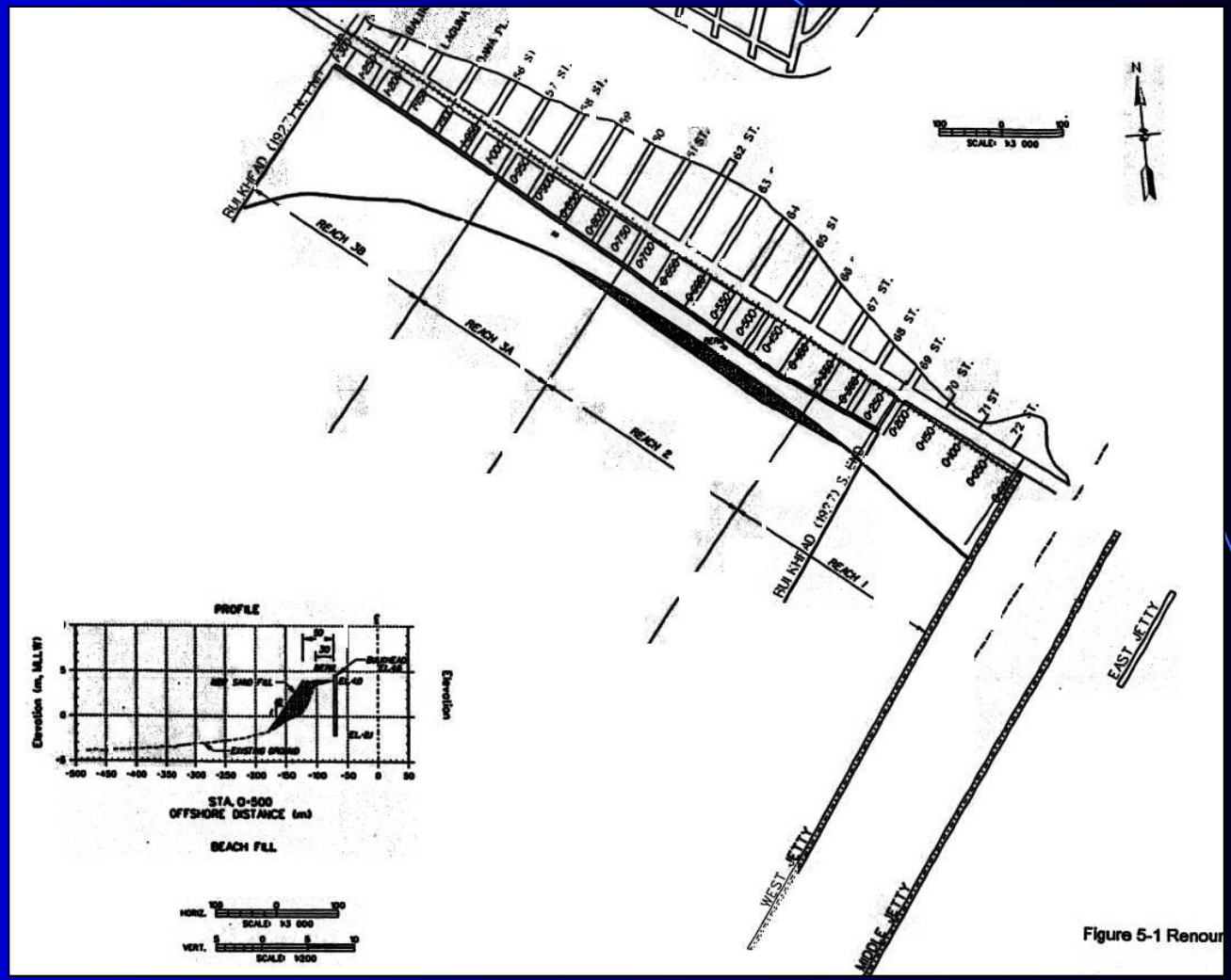


Figure 5-1 Renour

US ARMY
CORPS OF
ENGINEERS

Beachfill with Groins

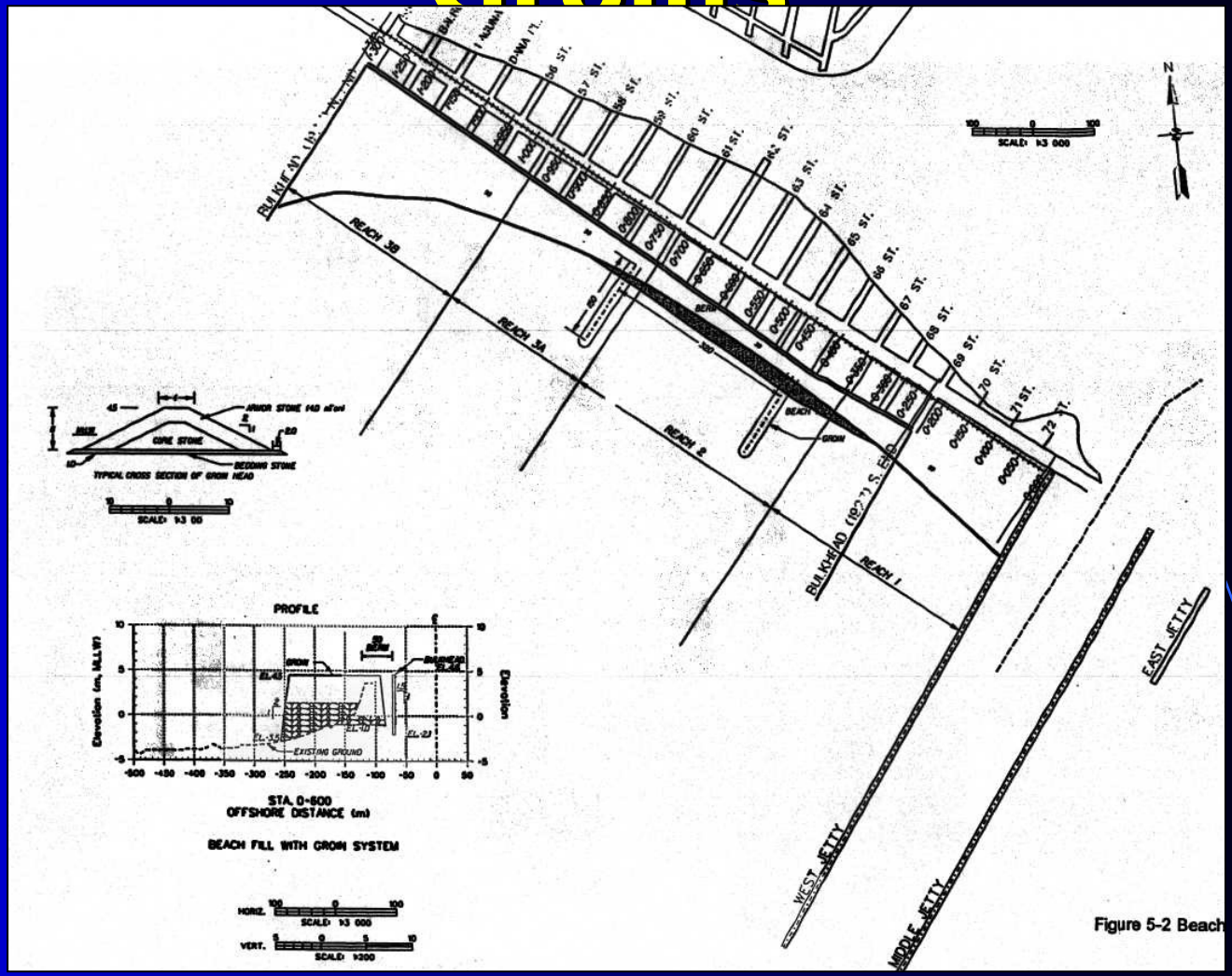


Figure 5-2 Beach

US ARMY
CORPS OF
ENGINEERS

Perched Beach

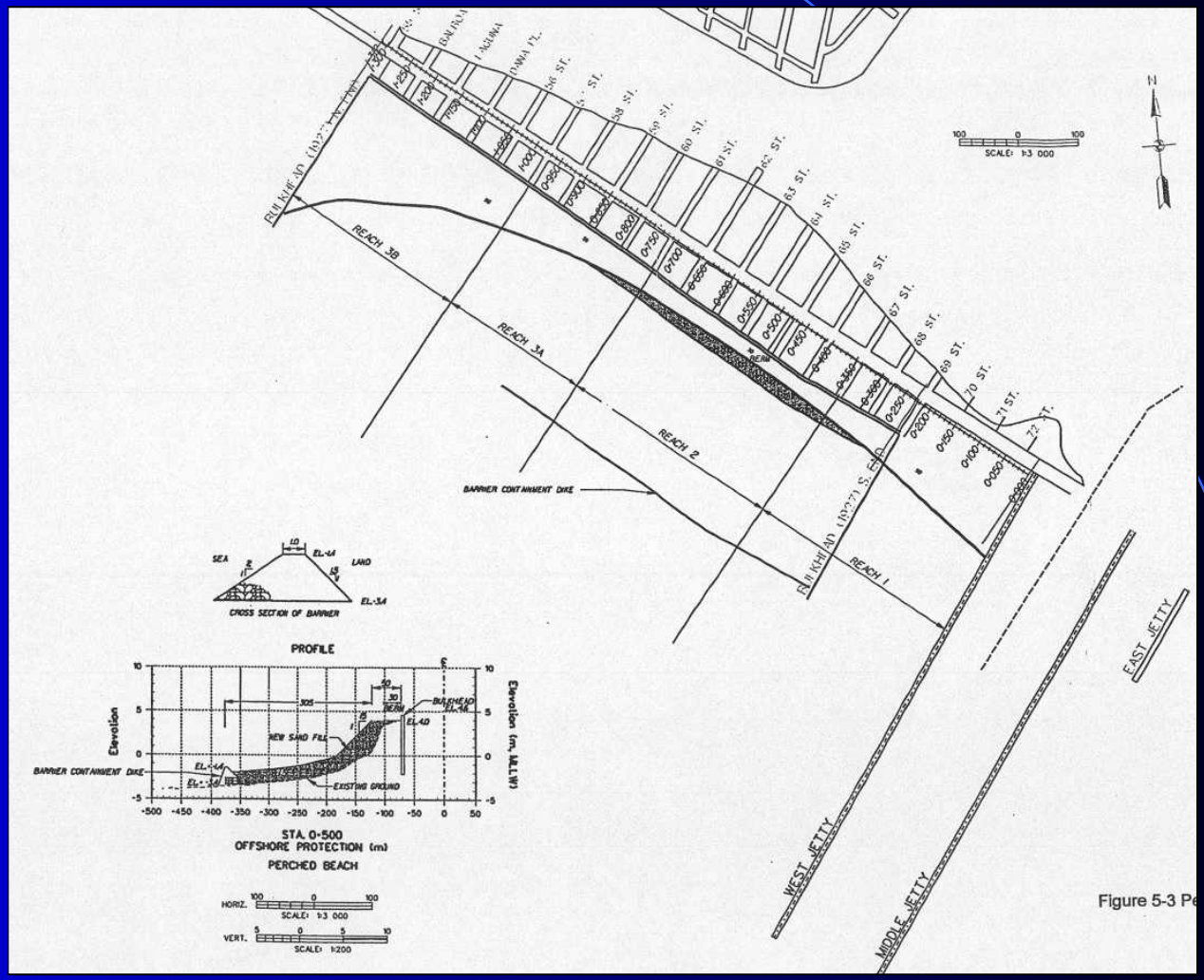
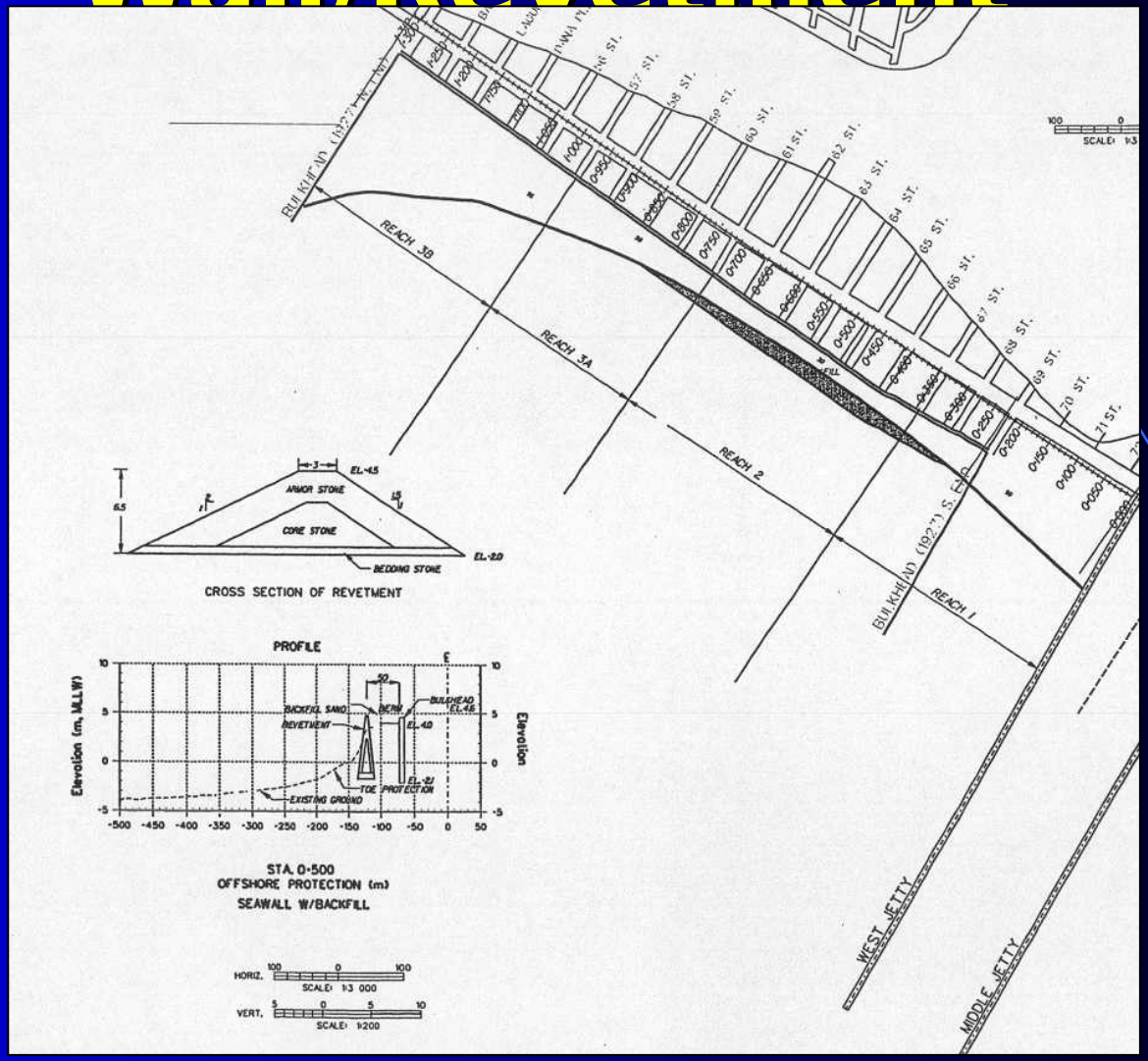


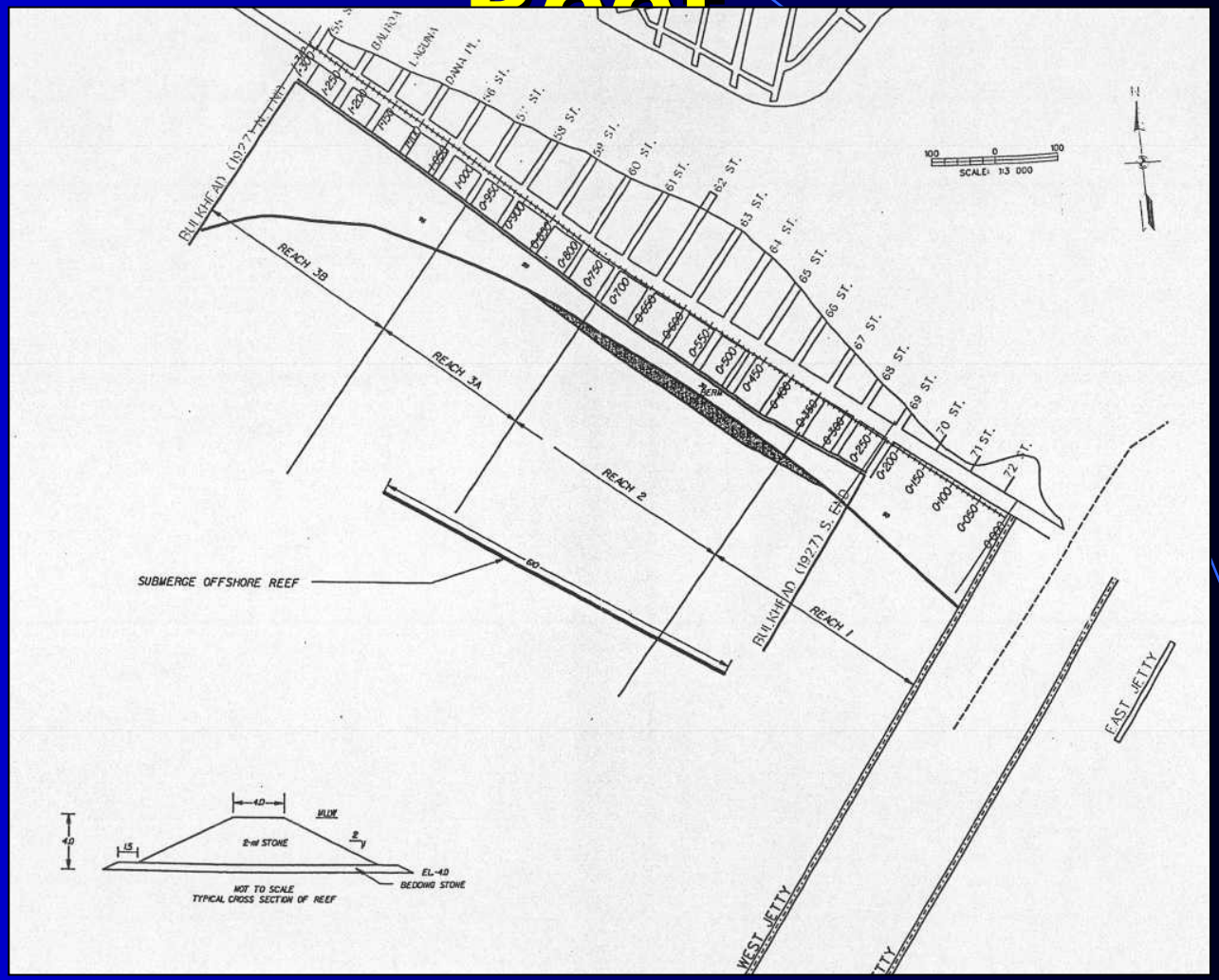
Figure 5-3 Pe

US ARMY
CORPS OF
ENGINEERS

Sea Wall/Revetment



Submerged Offshore Reef



US ARMY CORPS OF ENGINEERS

Reconnaissance Finding

- Avg. Annual Storm Damages estimated to be about $500,000
  - Impacts From Inundation
  - Structural Failure
    - Homes
    - Timber Bulkhead

Reconnaissance Phase

- Recon. Report 905(b) Nov 2000
- Project Management Plan Jun 2001
- Feasibility Cost Shared Agreement Jan 2002

Feasibility Study – Phase I

- Study determines existing and without project future conditions and includes preliminary screening of alternative plans, based on analysis of anticipated:
  - Environmental benefits,
  - Engineering viability and effectiveness,
  - Social impacts,
  - Community acceptance,
  - and regional impacts.

Feasibility Study – Phase II

- Includes detailed evaluation of several alternative plans/projects and selection of a recommended plan
  - Draft Report including EIS/EIR documents
  - Public Review
  - Approval by Assistant Secretary of the Army and transmit to Congress

US ARMY
CORPS OF
ENGINEERS

Public Comment Session

- Please wait until you are recognized
- Identify yourself and your affiliation

Points of Contact

U.S. Army Corps of Engineers

Alex Hernandez, Study Manager
Phone: (213) 452-3835
Fax: (213) 452-4204
E-Mail: alejandro.hernandez@usace.army.mil

City of Long Beach

Dennis Eschen
Phone: (562) 570-3130
Fax: (562) 570-3119
E-Mail: deeschen@ci.long-beach.ca.us

N
NOTE:
1. ELEVATIONS SHOWN IN METERS INDICATE THE GENERAL CONDITIONS EXISTING ONLY AT THE TIME OF SURVEY
2. LAND CONTOURS ARE BASED ON LIDAR DATA COLLECTED ON APRIL 10, 1998
3. HORIZONTAL DATUM USED IS NORTH AMERICAN DATUM OF 1983
4. AERIAL PHOTOGRAPHY BY EAGLE AERIAL PHOTO, MARCH 2001

US ARMY CORPS OF ENGINEERS

Table 2-4, Nourishment History at Peninsula Beach

Year	Project	Amount, cu m (cu yds)	
1940's	Rebuild Beaches	2,300,000	(3,000,000)
1949	Clear Bay Entrance Channel	765,000	(1,000,000)
1954-56	Dredging of Alamitos Bay	2,300,000	(3,000,000)
1965	Clear Bay Entrance Channel	765,000	(1,000,000)
1973	Fill based on Aerial Photos of Beach	N/A	
1979	Clear Bay Entrance Channel	76,500	(100,000)
1980	Annual Maintenance	19,100	(25,000)
1981	Gravel Berm and Sand Fill (spring) Beach Protection (winter)	65,800 40,800	(86,000) (53,333)
1982	Annual Maintenance	19,100	(25,000)
1983	Support Artificial Seaweed	230,000	(300,000)
1984	Annual Maintenance	19,100	(25,000)
1985	Annual Maintenance	19,100	(25,000)
1986	Annual Maintenance	19,100	(25,000)
1987	Annual Maintenance	19,100	(25,000)
1988	Annual Maintenance	19,100	(25,000)
1989	Annual Maintenance	19,100	(25,000)
1990	Annual Maintenance	19,100	(25,000)
1991	Emergency Sand Bag Reef Annual Maintenance	1,500 19,100	(2,000) (25,000)
1992	Emergency Fill (72nd Place) Annual Maintenance	12,000 19,100	(15,600) (25,000)
1993	Concrete Rubble (72nd Place) Emergency Nourishment Nourishment (72nd Place) Nourishment (60th to 71st Place)	7,600 6,000 23,200 70,000	(10,000) (7,900) (30,400) (91,200)
1994-5	Nourishment (winter)	105,919	(138,456)
1996	Nourishment (Feb. to Mar.)	69,694	(91,104)

Source: City of Long Beach, 1996

US ARMY CORPS OF ENGINEERS

Cost and Benefits

Table 5-1 Summary of Alternative Cost and Benefits ($000)

	Plan 1 Renourishment	Plan 2 Renourishment with Groins	Plan 3 Perched Beach	Plan 4 Revetment	Plan 5 Submerged Breakwater
PROJECT COST					
First Cost of Construction	3281	5928	4203	7640	6120
Average Annual Cost	249	450	319	580	465
Annual Renourishment Cost*	344	184	171	38	185
Total Annual Cost**	597	642	496	629	658
ANNUAL BENEFITS					
Structural	217	217	217	217	217
Inundation	277	280	280	280	280
Public	ND	ND	ND	ND	ND
Recreation	0	0	0	0	0
Value of Time (VOT)	35	35	35	35	35
TOTAL ANNUAL BENEFITS	529	532	532	532	532
BENEFIT/COST RATIO	0.9	0.8	1.07	0.8	0.8
NET BENEFITS (NED)	(68)	(111)	36	(97)	(126)

* - Includes cost of renourishment as well and operation and maintenance on the permanent structure

** - Includes interest during construction (see economic appendix)

ND - Not Determined

Feasibility Milestones

- F1 – Study Initiation (Oct 2002)
- F2 – Public Workshop/Envr. Scoping (Nov 2002)
- F3 - Baseline Studies Complete (Oct 2003)
- F4 - Alternative Analysis Complete
- F5 - Draft Report and EIS/EIR
- F6 - Public Meeting
- F7 - Corps Review Conference
- F8 - Submit Final Report
- F9 – DE's Public Notice
- Chief's Report
- Project Authorization
- ASA (CW) to OMB